CLAIM AMENDMENTS

1. (Currently Amended) A method of ~~determining~~ detecting hydrogen peroxides and organic peroxides ~~oxidative stress~~ in a mammalian subject said method comprising:

a. obtaining a sample of a biological fluid from the subject;

b. mixing the biological fluid with a ferrous reaction reagent comprising 2-deoxyglucose and a ferrous (Fe^{2+}) compound;

c. incubating the biological fluid and the reaction reagent; and

d. detecting a coloured reaction product.

2. (Original) The method of claim 1 wherein the reaction reagent comprises a solution of 2-deoxyglucose, TBA, EDTA and ferrous sulfate.

3. (Original) The method of claim 2 wherein the reaction reagent is substantially free of ascorbic acid.

4. (Original) The method of claim 2 wherein the reaction reagent comprises 2-deoxyglucose in a concentration of between about 30 and 400 mM.

5. (Original) The method of claim 2 wherein the reaction reagent comprises 2-deoxyglucose in a concentration of between about 75 and 150 mM.

6. (Original) The method of claim 2 wherein the reaction reagent comprises TBA in a concentration of between about 10 and 200 mM.

7. (Original) The method of claim 2 wherein the reaction reagent comprises EDTA in a concentration of between about 0.5 and 3 mM.

8. (Original) The method of claim 2 wherein the reaction reagent comprises ferrous sulphate in concentration of between about 0.5 and 2.0 mM.

9. (Original) The method of claim 2 wherein the reaction reagent comprises an excess of Fe^{2+}.

10. (Original) The method of claim 2 wherein the reaction reagent comprises 100 mM 2-deoxyglucose, 50 mM TBA, 1.4 mM EDTA, and 1 mM ferrous sulphate.

11. (Original) The method of claim 1 wherein the biological fluid is selected from the group consisting of: urine, plasma, bioreactor material and respiratory aspirate.

12. (Original) The method of claim 1 wherein one part biological fluid is mixed with between about 5 and 15 parts of the reaction reagent.

13. (Original) The method of claim 1 wherein the mixture of the biological fluid and the reaction reagent is incubated at between 20 and 45 degrees Centrigrade.

14. (Original) The method of claim 1 wherein the mixtures is incubated for between about 5 and 30 minutes.

15. (Currently Amended) The method of claim 1 wherein the ferrous reaction [mixture] reagent is absorbed to a solid support.

16. (Currently Amended) A method of identifying a mammalian subject in need of medical treatment comprising:

a. obtaining a sample of biological fluid from ~~said~~ the subject; [[and]]

b. ~~assaying~~ determining oxidant level in the biological fluid ~~using a minimal method and~~ by mixing the fluid with a reagent comprising ~~containing~~ 2-deoxyglucose, and a ferrous [[ion]](Fe^{2+}) compound;

c. incubating the fluid and the reagent and determining the presence of oxidative stress within the subject by detecting a colorimetric change in the reaction product by comparing the reaction product with a reference standard and correlating the presence of oxidative stress

with a difference between the colorimetric properties of the product and the standard, thereby determining the need from medical treatment within the subject.

17. (Original) The method of claim 16 wherein peroxide-equivalent level is assayed according to the method of claim 1.

18. (Original) The method of claim 16 wherein the biological fluid is selected from the group consisting of: urine, plasma, bioreactor fluid and respiratory aspirant.

19. (Original) The method of claim 16 wherein the subject is a human.

20. (Original) A ferrous reaction reagent suitable for use in assaying oxidative stress, said reaction reagent comprising 2-deoxyglucose, TBA, EDTA, and ferrous sulfate, and being substantially free of ascorbic acid.

21. (Original) The reaction reagent of claim 20 comprising 2-deoxyglucose in a concentration of between about 30 and 400 mM.

22. (Original) The reaction reagent of claim 20 comprising TBA in a concentration of between about 10 and 200 mM.

23. (Original) The reaction reagent of claim 20 comprising EDTA in a concentration of between about 0.5 and 3 mM.

24. (Original) The reaction reagent of claim 20 comprising ferrous sulphate in a concentration of between about 0.5 and 2.0 mM.

25. (Original) The reaction reagent of claim 20 comprising an excess of Fe^{2+}.

26. (Original) The reaction reagent of claim 20 comprising 100 mM 2-deoxyglucose, 50 mM TBA, 1.4 mM EDTA, and 1 mM ferrous sulphate.

27. (Original) The reaction reagent of claim 20 absorbed on a solid support.

28. (Currently Amended) A kit suitable for use in assaying oxidative stress from a biological fluid, said kit comprising:

a. a ferrous reaction reagent comprising 2-deoxyglucose and a ferrous (Fe^{2+}) compound; and

b. a reference standard indicating oxidant levels.

29. (Original) The kit of claim 28 further comprising instructions for carrying out the method of claim 1.

30. (Original) The kit of claim 28 wherein the reaction reagent comprises 2-deoxyglucose, TBA, EDTA, and ferrous sulfate.

31. (Original) The kit of claim 30 wherein the reaction reagent is substantially free of ascorbic acid.

32. (Original) The kit of claim 28 wherein the reaction reagent is absorbed to a solid support.

33. (Currently Amended) The kit of claim 28 wherein the reaction reagent is the reaction reagent of claim [[50]] 26.

34. (Original) The kit of claim 28 wherein the standard indicating oxidant levels is based on differences in color that correspond to different oxidant levels.

35. (New) The method of claim 1 comprising the further step of determining the presence of oxidative stress within the subject, wherein the further step comprises detecting a colorimetric change in the reaction product by comparing the reaction product with a reference standard and correlating the presence of oxidative stress with a difference between the colorimetric properties of the reaction product and the standard.